

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P557494

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-80-87-EDD-90**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P557494
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-2STD-35-UNV-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

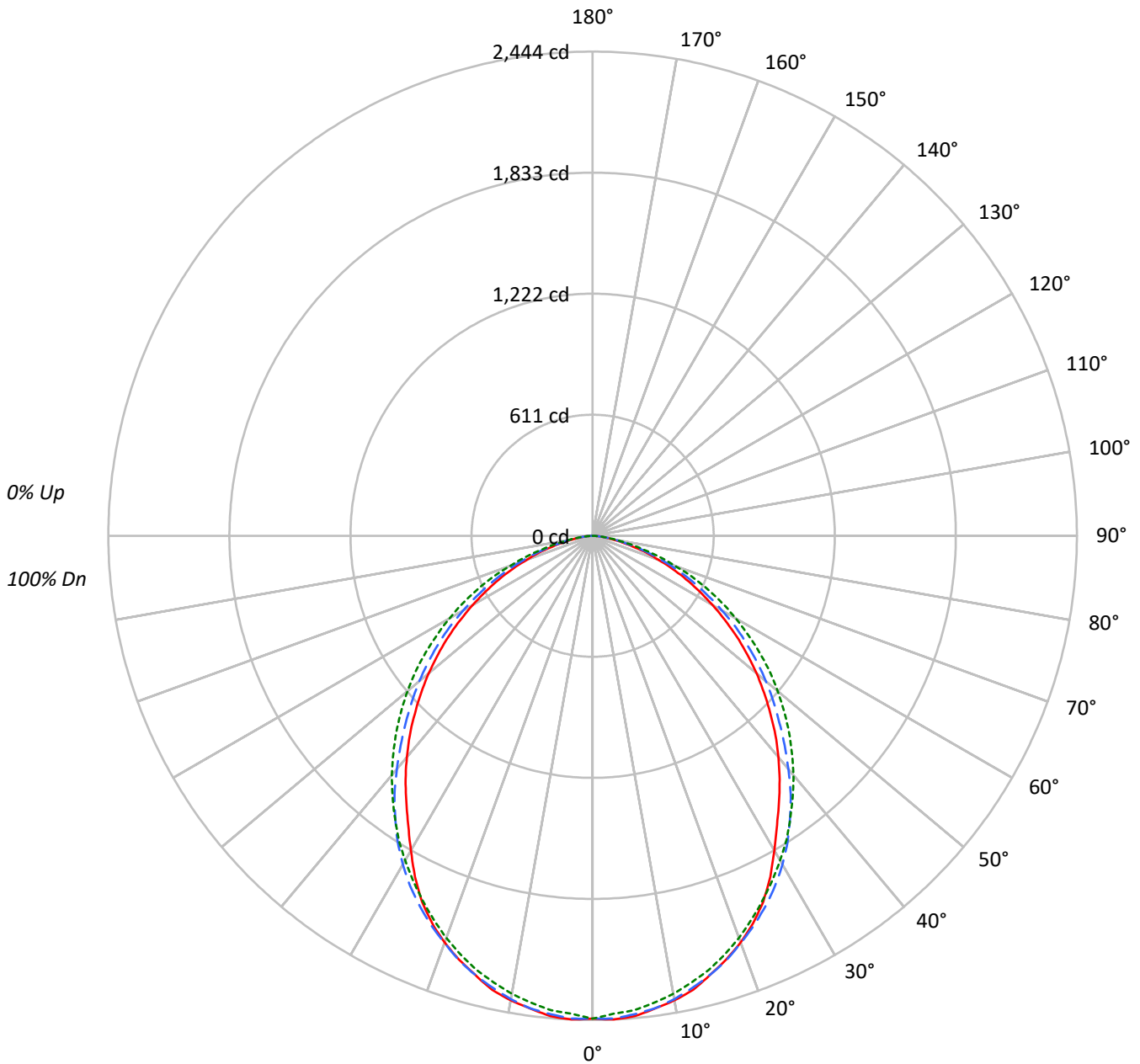
Lumens per Lamp: N/A
Luminaire Lumens: 5636.0 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P557494

CATALOG NUMBER: FUSL-12-4-LD4-2STD-35-UNV-80-87-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557494

CATALOG NUMBER: FUSL-12-4-LD4-2STD-35-UNV-80-87-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6559	6559	6559
5°	6576	6549	6493
10°	6507	6489	6415
15°	6391	6391	6318
20°	6256	6264	6184
25°	6050	6125	6028
30°	5697	5953	5880
35°	5383	5706	5715
40°	5122	5398	5539
45°	4829	5071	5331
50°	4520	4779	5104
55°	4169	4446	4828
60°	3754	4057	4490
65°	3315	3607	4084
70°	2762	3072	3470
75°	2171	2454	2717
80°	1553	1726	1915
85°	1013	1013	954



TEST NUMBER: P557494

CATALOG NUMBER: FUSL-12-4-LD4-2STD-35-UNV-80-87-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.5	4.1
10°-20°	644.7	11.4
20°-30°	942.1	16.7
30°-40°	1069.4	19.0
40°-50°	1032.4	18.3
50°-60°	851.6	15.1
60°-70°	567.1	10.1
70°-80°	253.8	4.5
80°-90°	45.4	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1816.3	32.2
0°-40°	2885.7	51.2
0°-60°	4769.7	84.6
0°-90°	5636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2437	2437	2437	2437	2437	
5°	2435	2434	2424	2411	2404	230
15°	2294	2300	2294	2284	2268	647
25°	2038	2054	2063	2048	2030	933
35°	1639	1661	1737	1746	1740	1027
45°	1269	1290	1332	1393	1401	979
55°	889	904	948	1000	1029	793
65°	521	535	566	607	641	516
75°	209	220	236	247	261	228
85°	33	33	33	31	31	44
90°	0	0	0	0	0	



TEST NUMBER: P557494

CATALOG NUMBER: FUSL-12-4-LD4-2STD-35-UNV-80-87-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2437.4	2437.4	2437.4	2437.4	2437.4
2.5°	2444.0	2444.9	2439.3	2424.3	2415.0
5°	2434.6	2433.7	2424.3	2411.2	2403.7
7.5°	2407.5	2409.3	2406.5	2387.8	2377.5
10°	2381.2	2382.2	2374.7	2359.7	2347.5
12.5°	2347.5	2346.6	2336.3	2328.8	2309.1
15°	2294.2	2299.8	2294.2	2283.9	2267.9
17.5°	2242.7	2242.7	2246.4	2228.6	2216.4
20°	2184.6	2187.4	2187.4	2173.4	2159.3
22.5°	2117.2	2125.6	2128.4	2113.4	2096.6
25°	2037.6	2053.5	2062.9	2047.9	2030.1
27.5°	1941.1	1965.5	1993.6	1982.3	1962.7
30°	1833.5	1869.0	1915.9	1906.5	1892.4
32.5°	1731.4	1767.0	1831.6	1827.8	1820.3
35°	1638.7	1661.2	1737.0	1746.4	1739.8
37.5°	1550.7	1571.3	1642.4	1664.0	1658.3
40°	1458.0	1480.4	1536.6	1575.0	1576.9
42.5°	1366.2	1387.7	1433.6	1488.9	1488.9
45°	1268.8	1290.3	1332.5	1393.3	1400.8
47.5°	1173.3	1195.8	1237.0	1297.8	1310.0
50°	1079.7	1100.3	1141.5	1200.5	1219.2
52.5°	982.3	1004.7	1045.0	1099.3	1126.5
55°	888.6	903.6	947.6	1000.1	1029.1
57.5°	791.2	805.3	854.9	899.9	929.8
60°	697.6	715.4	753.8	799.7	834.3
62.5°	607.7	626.4	659.2	699.5	738.8
65°	520.6	534.7	566.5	606.8	641.4
67.5°	436.4	448.5	480.4	508.5	545.0
70°	351.1	367.1	390.5	417.6	441.0
72.5°	282.8	289.3	309.0	328.7	353.0
75°	208.8	220.1	236.0	247.2	261.3
77.5°	149.8	156.4	165.7	175.1	188.2
80°	100.2	103.0	111.4	113.3	123.6
82.5°	60.9	62.7	64.6	65.5	69.3
85°	32.8	32.8	32.8	30.9	30.9
87.5°	18.7	18.7	15.9	13.1	9.4
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)